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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,593	04/28/2000	Samuel N. Zellner	BS99-186	3134
28970	7590	02/17/2004	EXAMINER	
SHAW PITTMAN			PHAN, MAN U	
IP GROUP			ART UNIT	PAPER NUMBER
1650 TYSONS BOULEVARD			2665	
SUITE 1300				
MCLEAN, VA 22102			DATE MAILED: 02/17/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. <b>09/559,593</b>  Examiner <b>Man Phan</b>	Applicant(s) <b>Zellner et al.</b>  Art Unit <b>2665</b>	
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address.--

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1)  Responsive to communication(s) filed on Dec 4, 2003
- 2a)  This action is FINAL.      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.
- Disposition of Claims
- 4)  Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-17 and 20-30 is/are rejected.
- 7)  Claim(s) 18 and 19 is/are objected to.
- 8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a)  All b)  Some\* c)  None of:
1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a)  The translation of the foreign language provisional application has been received.
- 15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

1. This communication is in response to applicant's 12/04/2003 Amendment in the application of Zellner et al. for the "Method for dynamic multi-level pricing for wireless communications according to quality of service" filed 04/28/2000. This application is a continuation in part of Application No. 08/903,534 filed on July 30, 1997 is now US Patent 6,069,882. The amendment and response have been entered and made of record. Claim 31 has been canceled per applicant's request, and claims 26, 30 have been amended. Claims 1-30 are pending in the application.

### ***Remarks***

2. Applicant's amendment and response with regard to the rejection under 35 U.S.C.103 are persuasive. Furthermore, the rejections of record under 35 U.S.C. § 103 of the claims are withdrawn in view of the newly discovered reference to Solondz (US# 6,192,248). Accordingly, This action is made Non-Final. Rejections based on the newly cited reference follows.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-8, 12-17 and 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solondz (US#6,192,248) in view of Chuah (US#6,226,277).

With respect to claims 1-2 and 20-30, both Solondz and Chuah disclose method and system for setting a priority level of a call in wireless communications according to the essential features of the claims. Solondz discloses a system for customizing service in a wireless communication system in accordance with a user profile, unique to each user of the system. In this system, a base station receives a call establishment request either via an external MTSO (mobile telephone switch office) or PSTN (public telephone switch network), or internally from a call establishment request, broadcasted by a wireless terminal associated with a first subscriber within a cell of interest. Both the base station and the wireless terminal are located in a cell (i.e., the cell of interest) of the wireless

communication system. The base station determines whether it has a free channel, or resource, to service the call establishment request. If the base station does not have a free channel to service the call establishment request, then a call processor determines a service priority level contained in a user profile of the first subscriber. This service priority level is communicated to the base station. The base station processes the call establishment request in accordance with the service priority level of the first subscriber and service priority levels of second subscribers that are involved in telephone calls active in the cell (See Fig. 2 2; Col. 1, lines 45 plus). Because the capacity of wireless communication system networks is fixed (*all wireless communication channels are in use*), access to placing or receiving a telephone call is a scarce resource that cannot always be expanded in a cost effective manner. Prioritization allows a service fee based allocation method to service the demand (*pricing according to quality of services*). Many customers are willing to pay higher subscription rates for "guaranteed" cellular service, which could be provided only by a prioritized network. It is possible that more customers would subscribe for service if rates were lower, but without prioritization, the network might not be able to handle the increased traffic demand without unacceptable call blocking rates (Col. 8, lines 25 plus). In the same field of endeavor, Chuah discloses a method for controlling admission of remote hosts to a base station based on usage priorities. If there are two user priority classes, class 1 and class 2, the system admits a threshold number of remote hosts of lower priority class 2 and a maximum total number of remote hosts. When a base station receives a connection request from a new user of class 1 (higher priority), if the current total number of admitted users is less than the

maximum allowable (capacity of the cell site), the new user of class 1 (high priority) is admitted, otherwise, the base station checks to see if any class 2 (lower priority) users are currently admitted and allow disconnection. If so, the base station disconnects a class 2 user (low priority) and admits the new class 1 user (high priority). In one embodiment, the base station disconnects the "least recently used" admitted class 2 user that allows disconnection (See Fig. 22; Col. 4, lines 48 plus).

Regarding claims 3-8, Chuah further teaches the selection of the plurality of priorities provided (*i.e., voice, E-mail, data*) is predetermined by the network according to the transaction type (*i.e., voice, E-mail or data*) in order to maximize capacity on the wireless network according to the time sensitivity of the type of transaction (*i.e., voice, E-mail or data*); and wherein transactions that require greater bandwidth for operation are of higher priority than transactions that require only an available bit rate for operation (Col. 18, lines 29 plus).

Regarding claims 12-17, Solondz further teaches a method and a system that allows a caller to dynamically change the priority level of a call so that the call is handled on a higher priority basis (*according to the subscriber plan*), in which prioritization allows a service fee based allocation method to service the demand. Many customers are willing to pay higher subscription rates for "guaranteed" cellular service, which could be provided only by a prioritized network (*transaction are charged according to the priority levels*). When the priority level of the call is changed, the call can be advanced in a call holding queue, a lower priority call can be interrupted or the call can be routed on a high-priority trunk capacity available for high-priority calls (*network has capacity for*

*transactions at the selected priority).* The division of subscribers into service levels according to the present invention allows a cellular service provider to purposely "over-subscribe" the network. (i.e., put more paying customers onto it than it could normally handle during peak demand) while still providing low blocking rates to the higher priority customers. The lower priority customers receive cellular service at a lower fee than would be possible if the network were engineered to handle the peak calling demand for the entire subscriber base (Col. 8, lines 25 plus). Moreover, in many new processing environments and architectures, communication systems and computer systems need to process and communicate data packets of different data types. For instance, electronic mail (email) messages, voice and image data are sent and received by the system as well as other multi-media content. However, live broadcasts (e.g., voice and data) need high priority transmission without jitter to allow natural conversation and appearance, while other information, such as email messages, can be communicated successfully at lower priorities.

One skilled in the art would have recognized the need for effectively and efficiently allocation of limited capacity on a wireless network by pricing according to the quality of service, and would have applied Chuah's novel use of the priority-based quality of service in CDMA communication into Solondz's teaching of service prioritization in a cellular telephone system. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Chuah's method for admitting new connections based on usage priorities in a multiple access system for communications networks into Solondz's service customization in a wireless

communication system with the motivation being to provide a method and system for policing pricing wireless communications services on a wireless network according to a selected transmission priority level.

5. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solondz (US#6,192,248) in view of Chuah (US#6,226,277), as applied to the claims above, and further in view of Baiyor et al. (US#6,282,429).

Regarding to claims 9-11, these claim differ from claim 1 above in that the claims require the steps of selection of a plurality of priorities available for each of a plurality of transaction types, wherein the selections of the plurality of priorities are subsets of priorities that are pre-determined by the network and are pre-selected by the subscriber. In the same field of endeavor, Baiyor et al. discloses a system for providing prioritized wireless communication service to wireless communication subscribers provides the capability to restrict access to wireless communications services to a selected set of subscribers, such that their access to wireless communication services is given preferential treatment (*pre-determined by the network and are pre-selected by the subscriber*). This is accomplished by provisioning the cell sites of a wireless communications system into a plurality of service priority groupings, with wireless subscribers being assigned a one of the plurality of service priorities (*selection of a plurality of priorities available for each of a plurality of transaction types*). The wireless service provider can then differentially provide wireless communication services to the wireless subscribers, based upon the service priority assigned to a particular subscriber.

The wireless subscribers who have been assigned a predetermined service priority are provided with access to wireless communication capacity in the wireless communication system via the dialing of a predetermined feature code (*pre-determined by the network and are pre-selected by the subscriber*) to ensure their preferential access to wireless communication services (Fig. 2, Col. 2, lines 9 plus).

One skilled in the art would have recognized the need for effectively and efficiently allocation of limited capacity on a wireless network by pricing according to the quality of service, and would have applied Baiyor's subsets of priorities that are pre-determined by the network and are pre-selected by the subscriber, and Chuah's novel use of the priority-based quality of service in CDMA communication into Solondz's teaching of service prioritization in a cellular telephone system. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Baiyor's system for providing prioritized wireless communication service to wireless communication subscribers, and Chuah's method for admitting new connections based on usage priorities in a multiple access system for communications networks into Solondz's service customization in a wireless communication system with the motivation being to provide a method and system for policing pricing wireless communications services on a wireless network according to a selected transmission priority level.

***Allowable Subject Matter***

6. Claims 18-19 are objected to as being dependent upon the rejected base claims, but

would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

7. The following is an examiner's statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose or suggest the steps of receiving a request to transmit the remainder of the wireless communication at a second selected priority from the plurality of available priorities; transmitting portions of the wireless communication transaction during periods of time when the network has capacity for transaction at the second selected priority, until completion of the transaction; and charging an amount for the remainder of the wireless communication transaction at a price corresponding to the second selected priority, as specifically recited in the claimed invention.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Ueda (US#6,009,331) is cited to show the communication system having means for enabling channel assignment to calling terminal according to priority.

The Solondz (US#5,615,249) is cited to show the service prioritization in a cellular telephone system.

The Dalal (US#6,321,093) is cited to show the system and method for controlling priority calls in a wireless network.

The Chuah (US#6,377,548) is cited to show the method for admitting new connections based on measured quantities in a multiple access system for communications networks.

The Chuah (US#6,567,416) is cited to show the method for access control in a multiple access system for communications networks.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (703)305-1029. The examiner can normally be reached on Mon - Fri from 6:30 to 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:** (703) 305-9051, (for formal communications intended for entry)

**Or:** (703) 305-3988 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Mphan.

02/06/2004



MAN PHAN  
PATENT EXAMINER